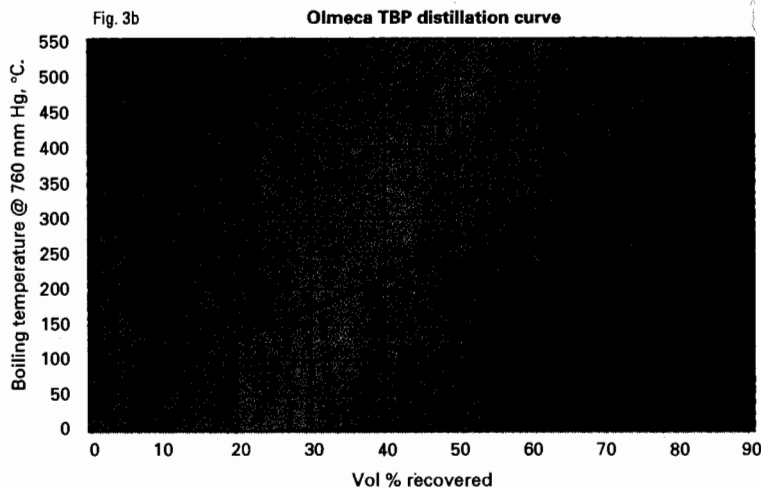
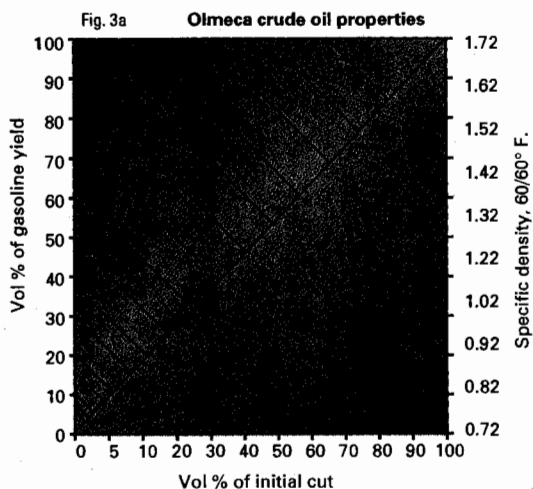
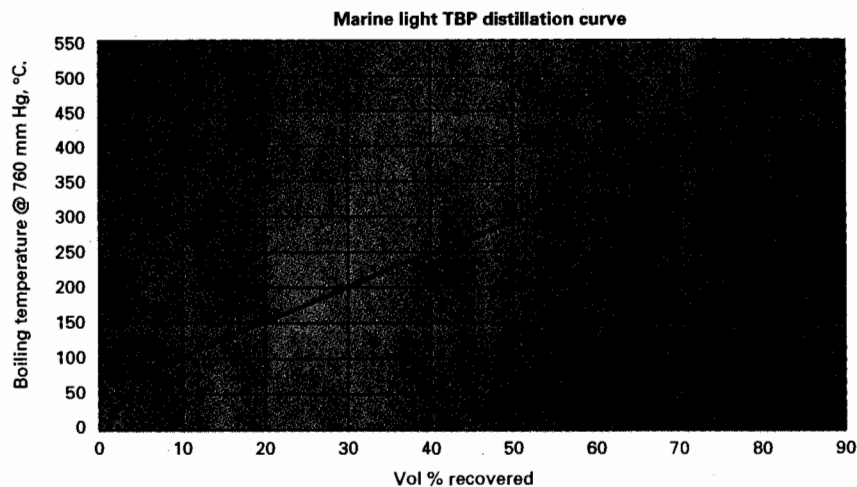


## OLMECA CHARACTERISTICS



## MARINE LIGHT TBP DISTILLATION CURVE



Yield, vol %	10.3
Gravity, °API	8.9
Sulfur, wt %	3.4
Asphaltenes, wt %	7.6
Viscosity @ 210° F., cst	210.8
Nickel, ppm	19.0
Vanadium, ppm	60.0
Conradson carbon residue, wt %	22.0

### Maya

Maya crude is a heavy crude with a 21.5° API gravity. Its sulfur content is 3.4 wt %. Both UOP K factor and US Bureau of Mines distillation methods classify this crude as paraffinic and naphthenic. Its vacuum resid produces an excellent grade of asphalt.<sup>3</sup> Fig. 3 shows the distillation curve and specific gravity contour chart

for Maya crude.<sup>2</sup> A blend of Maya with a medium-gravity crude is an attractive feedstock to refining schemes. Since June 1998, the Cangrejera Petrochemical Complex, located in Coatzacoalcos, Veracruz, has processed only Maya crude, about 150,000 b/d.

The facility produces benzene, toluene, and xylenes. Recent production of Maya has been about 1.5 million b/d.<sup>1</sup> Mexico ships the crude from the ports of Dos Bocas and Cayo Arcas on the Gulf of Mexico and from Salina Cruz on the Pacific Coast.

### Whole crude

Gravity, °API 21.5

Sulfur, wt %	3.4
Viscosity @ 25° C., cst	170.1
Pour point, °C.	-30
Conradson carbon residue, wt %	10.8
Acidity, mg KOH/g	0.43
Vanadium, ppm	277.5
Nickel, ppm	52.9
Asphaltenes, wt %	8.6
Rvp, psi	6
UOP K factor	11.7
C <sub>5</sub> -, vol %	0.3

### Naphtha

Boiling range, ° F.	C <sub>5</sub> -351
Yield, vol %	15.3
Gravity, °API	60.4
Sulfur, wt %	0.10
Mercaptan sulfur, ppm	95
Rvp, psi	6.7
RON, clear	50.7

### Kerosine

Boiling range, ° F.	351-526
Yield, vol %	13.8
Gravity, °API	40.3
Sulfur, wt %	1.2
Pour point, °C.	-39
Smoke point, mm	20
Viscosity @ 100° F., cst	1.82
Aromatics, vol %	33.6

### Light gas oil

Boiling range, ° F.	526-651
Yield, vol %	9.4
Gravity, °API	29.7
Sulfur, wt %	2.46
Pour point, °C.	0
Diesel index	54
UOP K factor	11
Viscosity @ 100° F., cst	5.5
Basic nitrogen, ppm	199

### Heavy gas oil

Boiling range, °F.

Yield, vol %

Gravity, °API

Sulfur, wt %

Pour point, °C.

UOP K factor

Viscosity @ 100° F., cst

Basic nitrogen, ppm

### Residue

Boiling range, °F.

Yield, vol %

Gravity, °API

Sulfur, wt %

Asphaltenes, wt %

Viscosity @ 210° F., cst

Nickel, ppm

Vanadium, ppm

Conradson carbon residue, wt %

### Residue

Boiling range, °F.

Yield, vol %

Gravity, °API

Sulfur, wt %

Asphaltenes, wt %

Viscosity @ 210° F., cst

Nickel, ppm

Vanadium, ppm

Conradson carbon residue, wt %

### Asphalt AC-20

Yield, vol %

Viscosity @ 275° F., cst

Viscosity @ 140° F., cp

Flash point temperature, °C.

Penetration, 1/10 mm

### Marine Light

Marine Light crude is produced by several Mexican oil fields—Uech, Caan, Chuc, Taratunich, Pol, Batab, Abkatum, Ek, Balam, and Ixtoc—in the northeast and southwest areas of the Marine Region.

Recent production of Marine Light is about 721,000 b/d.<sup>1</sup> Fig. 4 shows the distillation curve for Marine Light.

### Whole crude

Gravity, °API

Sulfur, wt %

Viscosity @ 25° C., cst

Pour point, °C.

Conradson carbon residue, wt %

Acidity, mg KOH/g

Vanadium, ppm

Nickel, ppm

Asphaltenes, wt %

Rvp, psi

UOP K factor

651-1,000 C<sub>4</sub>-, vol %

24.3 Naphtha

20.6 Boiling range, °F.

3.25 Yield, vol %

30 Gravity, °API

11.54 Sulfur, wt %

61.7 Rvp, psi

525 RON, clear

### Kerosine

Boiling range, °F.

651+ Yield, vol %

61.2 Gravity, °API

9.5 Sulfur, wt %

4.70 Pour point, °C.

12.5 Smoke point, mm

610.9 Viscosity @ 100° F., cst

79.3 Aromatics, vol %

### Light gas oil

526-651° F.

Boiling range, °F.

Yield, vol %

1,000+ Gravity, °API

36.9 Sulfur, wt %

4.0 Pour point, °C.

5.3 Diesel index

20.5 UOP K factor

160,000 Viscosity @ 100° F., cst

125.2 Basic nitrogen, ppm

### Heavy gas oil

651-1,000

Boiling range, °F.

Yield, vol %

47.1 Gravity, °API

468.5 Sulfur, wt %

237,600 Pour point, °C.

294 UOP K factor

73 Viscosity @ 100° F., cst

Basic nitrogen, ppm

### Residue

Boiling range, °F.

651+ Yield, vol %

42.0 Gravity, °API

17.4 Sulfur, wt %

2.19 Asphaltenes, wt %

5.8 Viscosity @ 210° F., cst

26.8 Nickel, ppm

11.1 Vanadium, ppm

51.3 Conradson carbon residue, wt %

### Residue

Boiling range, °F.

1,000+ Yield, vol %

16.2 Gravity, °API

9.7 Sulfur, wt %

2.8 Asphaltenes, wt %

14.0 Viscosity @ 210° F., cst

389.4 Nickel, ppm

27.3 Vanadium, ppm

125.4 Conradson carbon residue, wt %

20.4 Rvp, psi

7.5 UOP K factor

11.97

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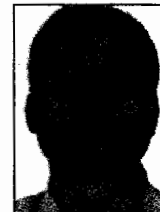
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